

Please add Claim 23.

--23. A method for quantifying a target nucleic acid in a sample, comprising the steps of:
amplifying a region of said target nucleic acid by polymerase chain reaction method in the presence of a fluorescent pigment whose fluorescence intensity is increased upon intercalation into a double-stranded nucleic acid;
monitoring the fluorescence intensity of said fluorescent pigment during said polymerase chain reaction; and
determining the quantity of said target nucleic acid in said sample.--

Remarks

The Interference

The present patent application is now in interference, No. 103,489, with Mitoma application, U.S. Serial No. 07/695,201. Coincident with this amendment Applicant has submitted in this interference a Contingent Preliminary Motion under 37 C.F.R. §1.633(c) requesting that two proposed substitute counts, 1A and 1B, be entered in place of the original count. Applicant is now adding, through this amendment, Claim 23 which corresponds to proposed Count 1B in the interference. In view of the fact that this application is in interference, this amendment is being served on the party Mitoma.

The Invention

The present specification provides as its invention a method for simultaneously amplifying and detecting a target nucleic acid in a sample. Simultaneous amplification and detection is made possible through the use of DNA binding agents which give a photodetectable signal when bound to a nucleic acid duplex. Furthermore, the application also discloses methods for measuring the amplification of a nucleic acid while the reaction is proceeding, providing methods for quantitating the initial amount of target nucleic acid in a sample.

The Amendments to the Claims

Applicant has canceled Claim 11 and added in its place new Claim 23 to better define the invention directed to the ability to quantitate the amount of target nucleic acid in a sample. The